

Notice of Allowability

Application No.

10/633,446

Examiner

NASIR SHAHRESTANI

Applicant(s)

MADAR ET AL.

Art Unit

3737

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/30/2008.
2. ☒ The allowed claim(s) is/are 1,3,5-9,11,15,17,18,25-39,41,42,45 and 48-50.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other See Continuation Sheet.

/Nasir Shahrestani/
Examiner, Art Unit 3737

Continuation of Attachment(s) 9. Other: Examiner Initiated Interview Summary.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Frank Cooch on 09/12/2008.

The application has been amended from the claim set dated 04/30/2008 as follows:

Claim 1 (currently amended): A method for detecting fluorescence emitted by cells in a wall of a body lumen, comprising the steps of:

- a. introducing ~~an autonomous solid support~~ a capsule swallowable by a human into a body lumen;
- b. illuminating cells in a lumen wall of the body lumen from a light source mounted to the capsule ~~solid support~~ with a wavelength that excites a particular fluorescent signal;
- c. introducing to cells in the lumen wall including the illuminated cells, an exogenous fluorescent-labeled probe that binds to or is internalized by certain cells in the lumen wall comprising releasing the exogenous fluorescent-labeled probe from a first reservoir on the solid support and the particular fluorescent signal is emitted by the exogenous probe;
- d. generating an electric field from an electrode on the capsule ~~solid support~~ to enhance uptake of the exogenous probe;
- e. detecting at a detector mounted to the a capsule ~~solid support~~ whether illuminated cells illuminated during step b emit the particular fluorescent signal;

f. if the particular fluorescent signal is detected from the illuminated cells, then determining at least one of an intensity and a position in the lumen wall of the detected fluorescent signal;

g. releasing a drug from a second reservoir on the capsule solid support for killing abnormal cells indicated by the detected particular fluorescent signal; and

h. controlling the movement of the capsule autonomous solid support to keep it in place to monitor the efficacy of treatment by the released drug.

Claim 11 (currently amended): The method as recited in Claim 1, further comprising, before said step of illuminating the cells in the lumen wall, performing the step of emitting ultrasonic waves from a sound source on the capsule solid support to enhance uptake of the exogenous probe.

Claim 17 (currently amended): The method as recited in claim 1, said step of releasing the drug that kills the abnormal cells comprises releasing the drug from a reservoir on a different capsule solid support introduced into the lumen of the intestine.

Claim 18 (currently amended): The method as recited in Claim 1, further comprising the step of emitting ultrasonic waves from a sound source on the capsule solid support to enhance uptake of the drug.

Claims 22-24 (canceled)

The following is an examiner's statement of reasons for allowance: The prior art of record does not teach nor fairly suggest a method for detecting fluorescence emitted by cells in a wall of a body lumen, specifically comprising the steps of introducing a capsule with two distinct reservoirs utilized as stated in independent claims 1 and 25, to determine intensity and a position in a lumen wall and further, the introduction of a second capsule as claimed is not shown in the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NASIR SHAHRESTANI whose telephone number is (571)270-1031. The examiner can normally be reached on Mon.-Thurs: 7:30-5:00, 2nd Friday: 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian L Casler/
Supervisory Patent Examiner, Art Unit
3737

/Nasir Shahrestani/
Examiner, Art Unit 3737